

Comparative study of the efficacy of Remifentanil alone and in combination with Dexamethasone in controlling labor pain

Abstract

Background and Objective: Labor pain is often severe. Unrelieved labor pain can have an adverse effect on the physiologic status of women. Pain during labor is accompanied by fear, which is related to slower progress of labor. Accurate measurement and appropriate management of pain is a significant problem for attendant medical and nursing personnel. There are choices to be made during pregnancy about options available for pain relief in labor; each method has its own risks and benefits, with variations in effectiveness, availability and acceptability. The purpose of this study was to compare the effect of remifentanil with and without dexamethasone among women undergoing normal vaginal delivery.

Methods: In this clinical trial study, 90 women with term pregnancy were observed. In all of the cases, labor pains started spontaneously and had fetal and maternal indication for normal vaginal delivery. They were divided into two groups randomly. The first group received remifentanil with dexamethasone and the second group received the remifentanil. Data of labor pain and outcome of delivery collected by means of questionnaires.

Results: Pain severity according to VAS score was significantly lower in patients who received remifentanil and dexamethasone after 30, 60 and 120 min post intervention VS subjects with remifentanil. Duration of labor's active phase in remifentanil and dexamethasone group was significantly lower than other group. Analysis of the pooled risk differences showed that none of the side effects investigated were significantly different between two groups unless nausea, vomiting and headache that was significantly higher in remifentanil users. There wasn't significant difference regarding in FHR. Significant difference was not observed among the groups regarding apgar in 1st and 5th minute between two groups. Analysis of the maternal complications between two groups showed that there were significantly different between two groups about heartbeat, SBP and DBP.

Conclusions: Use of remifentanil and dexamethasone has more beneficial effects for many parturient women compared to remifentanil.

Key words: Remifentanil, labor Pain, Dexamethasone